

Morphology I

FSEM CORE S119: Language as Human Nature

Fall 2025

Prof. Forrest Davis

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Warm-up

1. Discuss with your neighbor the best place to get food on campus.
2. In at least American English, which is West Germanic language spoken by approximately 246 million speakers, some vowels are long (in duration; marked with ':') while others are short. Are long and short vowels allophones of the same phonemes or different phonemes? If they are allophones of the same phoneme, provide a phonological rule to account for their distribution.

'ride'	[ɹaɪjd]	'right'	[ɹaɪt]	'rye'	[ɹaɪ]
'aid'	[eɪjd]	'ate'	[eɪt]	'bay'	[beɪ]
'lobe'	[loʊwb]	'lope'	[loʊp]	'low'	[loʊ]
'teethe'	[tʰi:ð]	'teeth'	[tʰiθ]	'tea'	[tʰi]
'save'	[seɪv]	'safe'	[seɪf]	'say'	[seɪ]

Logistics

- Report 1 due Friday
- Office Hours today 3-6PM 331 Bernstein

Learning Objectives

- Describe the motivation for morphology
- Apply key terms for morphology
- Build morphological rules
- Understand morphological rule ordering and the structure of complex words

Summary: We lay out the motivation for morphology, cover some key terms, practice writing morphological rules, and end with a discussion of structural ambiguity.

Motivation for Morphology

WE BEGIN WITH AN OVERVIEW of the goals of morphology, with a refresher of the goals for phonology, via the slides.

The discussion today draws from Seth Cable's wonderful Introduction to Linguistic Theory materials taught at University of Massachusetts Amherst.

Morphology Key Terms and Concepts

AS WITH PHONOLOGY, WE WILL USE SOME technical terms to denote key parts of morphology.

- **Morpheme:** The smallest unit of language that conveys meaning or grammatical function (e.g., *build*, *-er*)
- **Free Morpheme:** A free morpheme is a morpheme that can occur on its own (e.g., *boy*)
- **Bound Morpheme:** A bound morpheme is a morpheme that cannot occur on its own (e.g., *-s* meaning plural)
- **Allomorphs:** Variant pronunciations of the same morpheme (e.g., *a* vs. *an*)
- **Affix:** A bound morpheme that attaches to another morpheme, either before as a *prefix*, after as a *suffix*, in between as a *infix*, or around as a *circumfix*

Characterizing Morphological Rules

We have to determine two things once we have identified an affix:

1. What types of words it can attach to
2. What type of word it produces

Question

1. Returning to -er (meaning 'one who Xs'), for the following examples, which are grammatical and which are ungrammatical:

baker (one who bakes)	pianoer (one who is a piano)
dancer (one who dances)	booker (one who is a book)
funner (one who is fun)	deader (one who is dead)

2. What parts of speech can '-er' attach to?
3. What is the part of speech after '-er' is attached?

We will use a similar formal notation for morphological rules to the one we used for phonological rules:

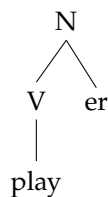
$$X \rightarrow Y + /Z/$$

Where,

- X is a part of speech
- \rightarrow means "can be created from"
- Y is a part of speech
- Z is the relevant morpheme (as phonemes)
- + means "combined with"
- "X can be created from Y combined with the morpheme Z"

Structural Representation of Words

We will diagram the structure of a word using a tree structure.¹



¹ For convenience I use English spelling here. It should be understood though that the basic units of morphemes include phonemes.

Practice

WITH YOUR SMALL GROUPS, develop morphological rules expanding on the following English data. You are given pairs of base words and the word after applying an affix. For each affix, give a formal morphological rule characterizing its distribution/application.

Practice Problems

1. happy happiness
 sad sadness
 blue blueness
 round roundness

2. ride rideable
 do doable
 see seeable
 like likable

3. bore boring
 tire tiring
 excite exciting
 annoy annoying

4. happy happier
 blue bluer
 sad sadder
 bad badder

Practice Problems

1. do redo
 tie retie
 zip rezip
 print reprint

2. happy unhappy
 sound unsound
 cool uncool

3. do undo
 tie untie
 zip unzip

Building Morphological Structure

WE CAN CHAIN TOGETHER MORPHOLOGICAL rules to build more morphological complex words. The order that rules apply matters!

Question

What rules are used to build the word “unhappiness”? Give a diagram of the structure.

Question

There are two ways to build the word ‘unlockable’. Give the diagrams for these two ways. Do they mean the same thing?

Before Next Class

- Reading and pre-class quiz
- Make progress on the first report